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# THE REVIEW OF PHYSICAL CHEMISTRY OF JAPAN

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Asahi's history dates as far back as 1923 when the late Mr. Jun Noguchi, who was the first president of the company, erected a synthetic ammonia plant in Nobeoka, present site of the company's major plants. This is a memorable plant in that the first commercial production of synthetic ammonia in the world by the Casale process was successfully started at this plant.

Thereafter Asahi's production activity continued to expand, with the exception of the war years, into great many fields. Using ample electric power from its own power plants and standing on the firmly established basis that primary raw materials are available within the company, Asahi has been producing chemical fibers, synthetic resin, explosives, chemical fertilizers, chemical seasoning, industrial nitrocellulose and several scores of chemicals of ammonia, soda and chlorine derivatives.

This fact points up to Asahi's special feature as a chemical company. Asahi ranks first in the production of viscose rayon in Japan and its cuprammonium rayon capacity is largest in the world. Using acrylonitrile monomer produced by Sohio process at its Kawasaki plant, Asahi produces polyacrylic fiber "Cashimilon" by its own process. Production acrylonitrile monomer and of polyacrylic fiber is also the largest in

Japan. Asahi's chemical seasoning (monosodium glutamate) Asahi Aji, ranks second in output of similar chemical seasonings. Sun-Nitro, Asahi's unique chemical fertilizer, is building up for itself a spectacular sales. Asahi's industrial nitrocellulose and electrolytic soda production is the largest in Japan. Asahi is also at the top in production volume of all the explosives manufacturers in Japan. Recently Asahi launched into three new fields of operation, i.e. nylon 6, synthetic rubber polybutadiene "ASADENE" and new building material "Silikaltsuitt".

At present, Asahi's products are exported to 50 different countries. Export of the process is also making headway. Worthy of mention in this connection is the export of viscose rayon manufacturing techniques to the Baroda Rayon Corporation, India and Dawood Industries Limited, Pakistan, and of polyacrylic fiber manufacturing techniques to ANIC S.p.A., Italy. Through all these activities, the excellence of Asahi's techniques is highly evaluated.

Asahi now has many powerful affiliates, including Asahi-Dow Limited and Shin Nihon Chemical Industry Co., Ltd. and is proceeding on the road to further growth as a multiple-purpose chemical company.

# The Review of Physical Chemistry of Japan

Vol. 34, 1964

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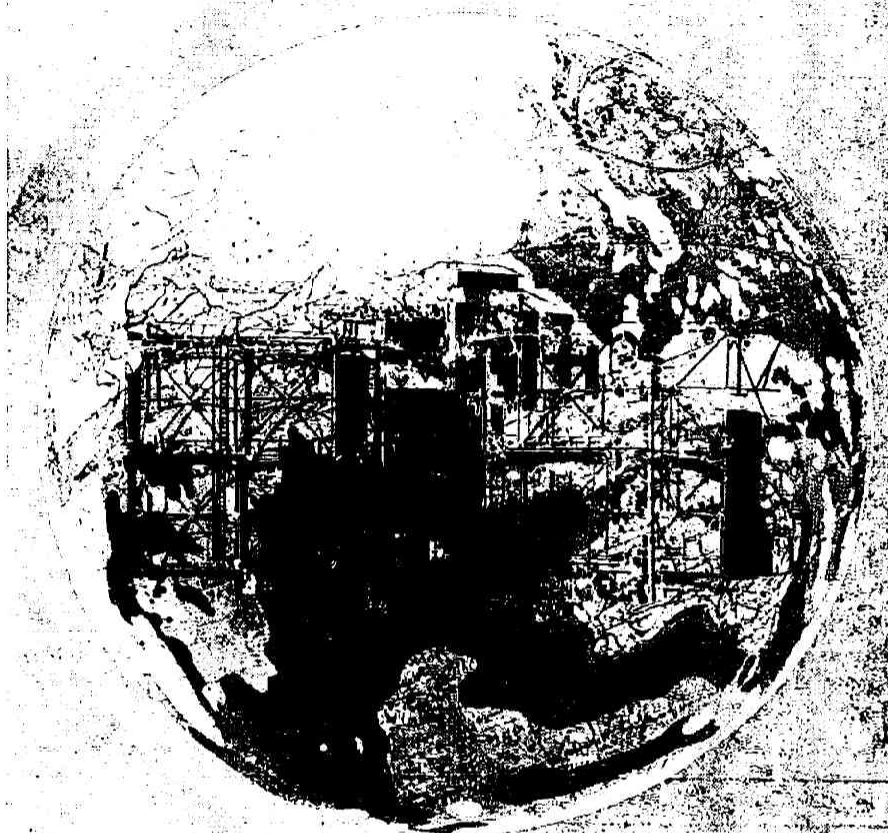


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	NaCl	KCl	KBr	KI	LiF	AgCl	KRS-5*	KRS-6*	CsI
Range of transparency (microns)	—15	—21	—27	—31	—6	—30	—40	—34	—70
Refractive index:	1.555	1.498	1.559	1.667	1.394	2.071	2.629	2.336	1.987
Solubility:**	35.7	28.5	53.5	127.5	0.27	$8.9 \times 10^{-5}$	0.02	0.32	44
Specific gravity: gr/cm <sup>3</sup>	2.16	1.59	2.75	3.13	2.64	5.56	7.2	7.19	4.53
Melting point: °C	801	776	730	680	843	455	415	424	621
Maximum diameter: cm	120	120	120	120	100	60	60	60	60
Maximum height: cm	100	100	100	70	60	100	60	100	100

\* KRS-5 is a compound single crystal of TlI and TlBr, and KRS-6 is a compound single crystal of TlCl and TlBr.

\*\* g/100 gr water at normal temperature.

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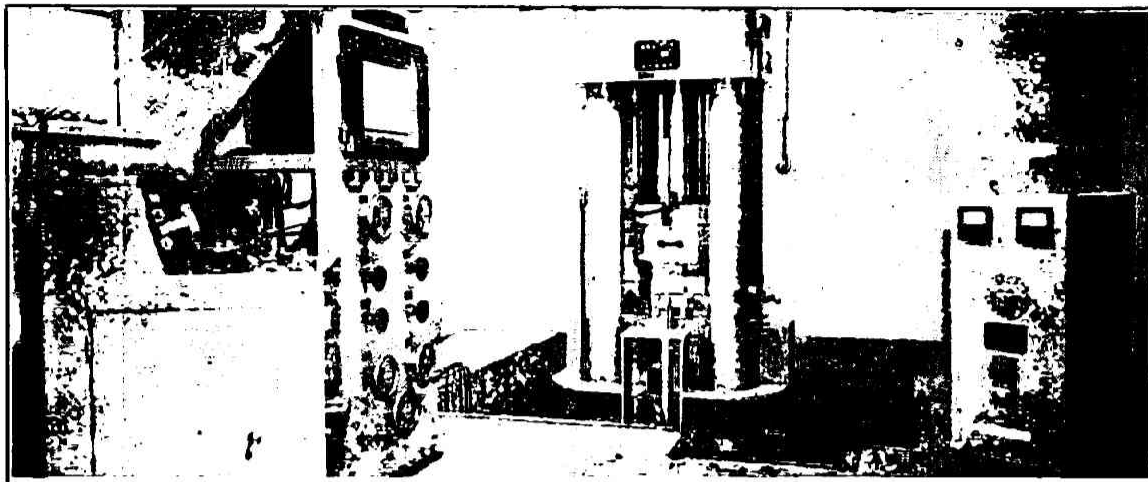
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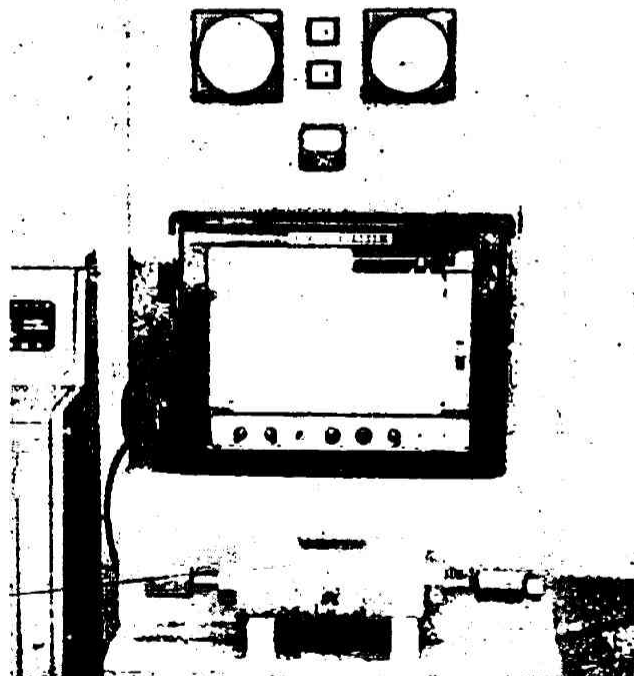
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